

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Atsushi HAYAMI

Serial No. 09/989,395

Filed: November 21, 2001

For: MODULATION SYSTEM

Art Unit:

Examiner:

Atty Docket: 0102/0189

RECEIVED  
OCT 28 2004  
Technology Center 2600

**SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT**  
**FILED PURSUANT TO 37 CFR 1.97**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

For insuring compliance with the applicants' duty of disclosure under 37 CFR §1.56, the undersigned hereby submits the documents listed on the attached Form PTO-1449 for consideration by the Examiner in charge of the above-identified patent application.

These documents are being submitted

- ☐ within three months of the filing of the above U.S. national application or of the date of entry of the U.S. national stage in an International Patent Application (no fee is due); (37 CFR §1.97(b))
- ☒ before receiving a first Office Action on the merits of the above-identified patent application (no fee is due); (37 CFR §1.97(b))
- ☐ following receipt of a first Office Action, but before issuance of a Final Office Action or a Notice of Allowance (if this box is checked, one of the last three boxes also must be checked); (37 CFR §1.97(c))

☐ concurrently with the filing of the RCE pursuant to 37 CFR 1.114

OR

☐ following receipt of a Notice of Allowance or a Final Office Action. The undersigned hereby requests consideration of this Information Disclosure Statement after the mailing the Final Office Action or Notice of Allowance by filing this Information Disclosure Statement under 37 CFR §1.97(d)

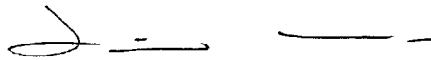
☐ The Commissioner is authorized to debit \$180.00 for payment of the fee set forth in 37 CFR § 1.17(p). (37 CFR §1.97(d)(2))

☒ The undersigned certifies that each item of this information is being submitted within three months of the date it was cited by the European Patent Office in a counterpart application. (37 CFR §1.97(e)(1))

☐ The undersigned certifies that, after making reasonable inquiry, he/she has no knowledge that any item of this information was cited by a foreign patent office in a counterpart application or was known more than three months prior to this submission. (37 CFR §1.97(e)(2))

The Commissioner is hereby authorized to charge payment of any deficiency in the above fee(s) or to charge any additional fees required under 37 CFR § 1.16 or 1.17 or credit any overpayment to Deposit Account No. 50-0501. A duplicate copy of this authorization is attached for the Finance Branch.

Respectfully submitted,



Louis Woo, Reg. No. 31,730  
Law Offices of Louis Woo  
717 North Fayette Street  
Alexandria, Virginia 22314  
Phone: (703) 299-4090

Date: Oct 26, 2004

FORM PTO-1449

## INFORMATION DISCLOSURE CITATION

OCT 26 2004

Atty Docket  
0102/0189Serial No.  
09/989,395Applicant  
Atsushi HAYAMIFiling Date  
November 21, 2001

Group Art Unit

## U.S. PATENT DOCUMENTS

Examiner Initial		Document Number	Date	Name	Class	Sub-Class	Filing Date
	AA	5,734,341	03/31/1998	Walker			11/01/1996
	AB	4,547,890	10/15/1985	Gindi			09/28/1982
	AC	4,520,346	05/28/1985	Shimada			04/23/1982
	AD						
	AE						
	AF						
	AG						
	AH						
	AI						
	AJ						
	AK						

RECEIVED

OCT 28 2004

Technology Center 2600

## FOREIGN PATENT DOCUMENTS

		Document Number	Date	Country	Class	Sub-Class	Translation
	AL						
	AM						
	AN						
	AO						
	AP						

## OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

	AR		
	AS		
	AT		

Examiner

Date Considered

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP § 609.

Draw line through citation if not in conformance and not considered.

Include copy of this form with next communication to Applicant.



P.B.5818 - Patentlaan 2  
2280 HV Rijswijk (ZH)  
☎ +31 70 340 2040  
TX 31651 epo nl  
FAX +31 70 340 3016

Europäisches  
Patentamt

Zweigstelle  
in Den Haag  
Recherchen-  
abteilung

European  
Patent Office

Branch at  
The Hague  
Search  
division

Office européen  
des brevets

Département à  
La Haye  
Division de la  
recherche

Senior, Alan Murray  
J.A. KEMP & CO.,  
14 South Square,  
Gray's Inn  
London WC1R 5JJ  
GRANDE BRETAGNE

J.A. KEMP & Co.

Rec'd. 15 SEP 2004

Action by.....

Datum/Date

15.09.04

Zeichen/Ref./Réf. N.84266 AMS/JGL	Anmeldung Nr./Application No./Demande n°/Patent Nr./Patent No./Brevet n°. 02250040.9-2223-
Anmelder/Applicant/Demandeur/Patentinhaber/Proprietor/Titulaire Victor Company of Japan, Ltd.	

## COMMUNICATION

The European Patent Office herewith transmits as an enclosure the European search report for the above-mentioned European patent application.

If applicable, copies of the documents cited in the European search report are attached.

☒ Additional set(s) of copies of the documents cited in the European search report is (are) enclosed as well.

The following specifications given by the applicant have been approved by the Search Division:

☒ abstract

☒ title

☐ The abstract was modified by the Search Division and the definitive text is attached to this communication.

The following figure will be published together with the abstract: 12

## REFUND OF THE SEARCH FEE

If applicable under Article 10 Rules relating to fees, a separate communication from the Receiving Section on the refund of the search fee will be sent later.





DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
1	A	US 5 734 341 A (WALKER CHRISTOPHER PAUL HULME) 31 March 1998 (1998-03-31) * column 6, line 11 - column 6, line 32; claim 1 *	1-15 H03M5/14 G11B20/14
2	A	US 4 547 890 A (GINDI ABRAHAM M) 15 October 1985 (1985-10-15) * column 6, line 63 - column 9, line 50 *	1
3	A	US 4 520 346 A (SHIMADA TOSHIYUKI) 28 May 1985 (1985-05-28)	
			TECHNICAL FIELDS SEARCHED (Int.Cl.7)
			H03M G11B
The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 8 September 2004	Examiner Devergranne, C
CATEGORY OF CITED DOCUMENTS			
X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document	

**ANNEX TO THE EUROPEAN SEARCH REPORT  
ON EUROPEAN PATENT APPLICATION NO.**

EP 02 25 0040

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.  
The members are as contained in the European Patent Office EDP file on  
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

08-09-2004

Patent document cited in search report		Publication date		Patent family member(s)	Publication date
US 5734341	A	31-03-1998	DE	69432038 D1	27-02-2003
			EP	0629068 A1	14-12-1994
			JP	2875160 B2	24-03-1999
			JP	7170297 A	04-07-1995
			US	5692021 A	25-11-1997
<hr/>					
US 4547890	A	15-10-1985	NONE		
<hr/>					
US 4520346	A	28-05-1985	JP	57176866 A	30-10-1982
			AU	552723 B2	19-06-1986
			AU	8291082 A	28-10-1982
			CA	1180450 A1	01-01-1985
			DE	3215179 A1	09-12-1982
			FR	2504755 A1	29-10-1982
			GB	2101854 A , B	19-01-1983
			NL	8201725 A	16-11-1982
<hr/>					